

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows. Please add new claim 20.

1. (Currently Amended) An electronic device, ~~including~~ comprising:
a chip part having an upper surface;
a shielding conductor to be united with a the upper surface of the chip part,
~~characterized in that an upper surface of the chip part is coated with the shielding~~
~~conductor[[,]]the shielding conductor includes a ceiling plate section covering the chip part~~
~~and side plate sections which are formed to be united with the ceiling plate section and to be~~
~~at a position lower than the ceiling plate section and which are arranged on both sides in a~~
~~horizontal direction of the chip part, including a ceiling plate section covering the chip part~~
~~side plates do not exist in both side ends in a front-rear direction of the shielding conductor,~~
~~and the side plate sections are electrically connected via a plurality of connecting means to a~~
~~ground layer of a mounting substrate and opposed side plate sections united with and~~
extending below the ceiling plate section and projecting in a horizontal direction around two
sides of the chip part; and
a mounting substrate having a ground layer, wherein the side plate sections are
electrically connected to the ground layer via a plurality of connecting means,
wherein a width W of the ceiling plate section in a front-rear direction is sized greater
than or equal to twice a harmonic mean of a length L of the ceiling plate section in a
horizontal direction between the opposed side plate sections and a height H of the ceiling
plate section in a vertical direction above the mounting substrate.

2. (Currently Amended) An electronic device, ~~a chip part in which the chip part is mounted on a surface of a mounting substrate, an upper surface of the chip part is coated with a shielding conductor to be united with the chip part, and the shielding conductor is electrically connected to a ground layer of the mounting substrate, characterized in that including comprising:~~

a chip part having an upper surface;

a mounting substrate having a mounting surface and a ground layer, wherein the chip part is mounted on the mounting surface of the mounting substrate; and

a the shielding conductor comprising: ~~includes a ceiling plate section covering the chip part and side plate sections which are formed to be united with the ceiling plate section and to be at a position lower than the ceiling plate section and which are arranged on both sides in a horizontal direction of the chip part, and openings are formed in both side ends in a front-rear direction of the shielding conductor to open both sides in a front-rear direction of the chip part, and the side plate sections of the shielding conductor are electrically connected via a plurality of connecting means in the front-rear direction to the ground layer of the mounting substrate~~

a ceiling plate section united with the upper surface of the chip part and covering the chip part; and

opposed side plate sections united with and extending below the ceiling plate section and projecting in a horizontal direction around two sides of the chip part,

wherein the shielding conductor forms openings in a front-rear direction of the shielding conductor and a front-rear direction of the chip part;

wherein the opposed side plate sections of the shielding conductor are electrically connected to the ground layer of the mounting substrate via a plurality of connecting means extending in a front-rear direction; and

wherein a width W of the ceiling plate section in a front-rear direction is sized greater than or equal to twice a harmonic mean of a length L of the openings in a horizontal direction between the opposed side plate sections and a height H of the ceiling plate section in a vertical direction above the mounting substrate.

3. (Currently Amended) An electronic device, ~~a chip part in which the chip part is mounted on a surface of a mounting substrate, an upper surface of the chip part is coated with a shielding conductor to be united with the chip part, and the shielding conductor is electrically connected to a ground layer of the mounting substrate, characterized in that including comprising:~~

a chip part having an upper surface;

a mounting substrate having a mounting surface and a ground layer, wherein the chip part is mounted on the mounting surface of the mounting substrate;

a the shielding conductor comprising: includes a ceiling plate section covering the chip part and side plate sections which are formed to be united with the ceiling plate section and to be at a position lower than the ceiling plate section and which are arranged on both sides in a horizontal direction of the chip part, and both end sides in a front-rear direction of the shielding conductor project from both side ends of the chip part, and an electromagnetic wave absorber is disposed between at least from the both side ends in a front-rear direction of the chip part to the both side ends in a front-rear direction of the shielding conductor, and the

~~side plate sections of the shielding conductor are electrically connected via a plurality of connecting means in the front-rear direction to the ground layer of the mounting substrate.~~

a ceiling plate section united with the upper surface of the chip part and covering the chip part;

opposed side plate sections united with and extending below the ceiling plate section and projecting in a horizontal direction around two sides of the chip part; and

opposed opening end sections projecting in a front-rear direction of the shielding conductor and the chip part;

wherein the opposed side plate sections are electrically connected to the ground layer of the mounting substrate via a plurality of connecting means extending in the front-rear direction; and

an electromagnetic wave absorber disposed between the chip part and at least one of the opposed opening end sections of the shielding conductor.

4. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that~~ wherein the chip part includes further comprises:
a two-terminal chip part.

5. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that in~~ wherein the width W of the shielding conductor[[,]] the shielding conductor width W is selected to have a size is larger than an area in which defined by terminals of the chip part, exist, by at least twice a harmonic mean of height H of the ceiling plate section and length L of the opening in the horizontal direction of the ceiling plate

~~section-~~

6. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim ~~[[1]]2~~, ~~characterized in that in the shielding conductor, end sections of the opening of the shielding conductor~~ wherein the openings formed by the shielding conductor are of a size larger than an area ~~in which~~ defined by terminals of the chip part ~~exist~~, by at least a length L of the openings in the horizontal direction of the ceiling plate section.

7. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that~~ wherein the plurality of connecting means comprises more than four connecting means ~~are used~~.

8. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that~~ further comprising:
a hole section is formed in the ceiling plate section of the shielding conductor to expose at least a portion of the chip part.

9. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that~~ wherein the shielding conductor further comprises:
a spring substance having an elasticity ~~is used as the shielding conductor~~.

10. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that~~ wherein the shielding conductor further comprises:

a shape memory metal having a characteristic of a spring; ~~is used as the shielding conductor,~~

a hole section is formed in the shape memory metal to expose at least a portion of the chip part, the hole section further including end sections, and

wherein the chip part is pushed by the spring characteristics of a spring of the end sections of the hole section.

11. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that a shielding conductor also serving as a cathode conductor is used in place of the shielding conductor, and~~ wherein the upper surface ceiling plate section, the opposed side surfaces plate sections, and a part of the upper surface surfaces of the chip part are covered by the shielding conductor also serving serve as a cathode conductor.

12. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that~~ wherein the connecting means further comprises:
a bump or a conductor having an elasticity ~~is used as the connecting means.~~

13. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 1, ~~characterized in that~~ wherein the chip part further comprises:
an array-shaped chip part ~~is used in place of the chip part and the array-shaped chip part includes~~ including a plurality of two-terminal chip parts integrated in a front-rear direction.

14. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 13, ~~characterized in that~~ further comprising:

two electrodes ~~are~~ formed on a mounting surface of the two-terminal chip parts and both of the electrodes are connected to surface layer electric wiring formed in the horizontal direction.

15. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim ~~[[11]]~~ 14, ~~characterized in that~~ wherein only one of the two electrodes is formed on a mounting surface of each of a plurality of two-terminal chip parts, ~~only one of the electrodes is formed.~~

16. (Currently Amended) An electronic device ~~including a chip part~~ in accordance with claim 15, ~~characterized in that~~ further comprising:

the one of the two electrodes is connected to a surface layer electric wiring formed in the horizontal direction; and

an optical waveguide is arranged in the horizontal direction in the mounting substrate below the array-shaped chip part.

17. (Currently Amended) A method of manufacturing an electronic device including a chip part ~~in which the chip part is mounted on a surface of a mounting substrate, a shielding conductor united with and covering an upper surface of the chip part is coated with a shielding conductor, and~~ wherein the shielding conductor is electrically connected to a

ground layer of the mounting substrate, ~~characterized by the method of manufacturing~~
comprising:

~~a step of assembling the chip part with the shielding conductor into a unit, by using a~~
~~the shielding conductor including a ceiling plate section united to and covering the chip part,~~
~~and opposed side plate sections ~~which are formed to be~~ united with the ceiling plate section~~
~~and extending below the ceiling plate section and projecting in a horizontal direction around~~
~~two sides of the chip part; and to be at a position lower than the ceiling plate section and~~
~~which are arranged on both sides in a horizontal direction of the chip part and by coating an~~
~~upper surface of the chip part with the ceiling plate section; and~~

~~a step of using a mounting substrate in which a ground layer is formed, arranging on~~
~~the mounting substrate in which the ground layer is formed the shielding conductor~~
~~assembled with the chip part into a the unit[[.]]; and~~

mounting the chip part on a surface of the mounting substrate, and electrically
connecting the shielding conductor to the ground layer at the same time.

18. (Currently Amended) A method of manufacturing an electronic device
including a chip part ~~in which the chip part is~~ mounted on a surface of a mounting substrate, ~~a~~
~~shielding conductor united with and covering~~ an upper surface of the chip part ~~is coated with~~
~~a shielding conductor, and wherein~~ the shielding conductor is electrically connected to a
ground layer of the mounting substrate, ~~characterized by the method of manufacturing~~
comprising:

~~a step of using a mounting substrate in which a ground layer is formed, arranging the~~
chip part on the mounting substrate on which a ground layer is formed, and mounting the chip

part on a surface of the mounting substrate; and

~~a step of using a shielding conductor including a ceiling plate section covering the chip part and side plate sections which are formed to be united with the ceiling plate section and to be at a position lower than the ceiling plate section and which are arranged on both sides in a horizontal direction of the chip part,~~

sizing a width W of a ceiling plate section of a shielding conductor in a front-rear direction greater than or equal to twice a harmonic mean of a length L of the ceiling plate section in a horizontal direction between opposed side plate sections and a height H of the ceiling plate section in a vertical direction above the mounting substrate, wherein the opposed side plate sections are united with the ceiling plate section and extend below the ceiling plate section and project in a horizontal direction around two sides of the chip part;

arranging the shielding conductor on the mounting substrate[[,]];

electrically connecting the shielding conductor to the ground layer[[,]]; and

covering an upper surface of the chip part with the ceiling plate section.

19. (Currently Amended) A method of manufacturing an electronic device including a chip part in accordance with claim 17, ~~characterized in that~~ further comprising:

using a plurality of connecting means ~~are used~~ when electrically connecting the shielding conductor ~~is electrically connected~~ to the ground layer.

20. (New) A method of manufacturing an electronic device including a chip part in accordance with claim 17, further comprising:

sizing a width W of a ceiling plate section of a shielding conductor in a front-rear

direction greater than or equal to twice a harmonic mean of a length L of the ceiling plate section in a horizontal direction between opposed side plate sections and a height H of the ceiling plate section in a vertical direction above the mounting substrate.